PART ONE: KNOWING THE FACTS

State and local officials, business owners, and local residents supporting highway investments and other policies designed to accommodate, rather than stifle, growth often face a daunting array of opponents. For quality growth advocates, it is important to know the facts about key issues in the debate over suburban development, traffic congestion, and other growth-related concerns. **Part One** of this toolkit, called "Knowing the Facts," provides important information needed to dispel myths that are often disseminated by anti-growth activists.

PLANNING FOR QUALITY GROWTH: BUILDING BETTER COMMUNITIES

America's population is growing, creating demand for new housing and an expanded transportation infrastructure. As Americans address the challenges associated with community growth, we should continue to emphasize development that preserves each person's right to choose where to live and how to travel. When local leaders plan for quality growth, they help build better communities.

PLANNING FOR QUALITY GROWTH: BUILDING BETTER COMMUNITIES

Background

People living in growing communities are benefiting from the many by-products of growth. Growth in suburban areas often is the result of new businesses and new jobs, producing a larger tax base and a stronger local economy. Growth in communities also provides

individuals with more choices for shopping, dining, daycare, health care, recreation, and entertainment. There is a general feeling of progress driven by newcomers finding homes, schools, and jobs to improve their quality of life. A recent poll indicates that nearly three-quarters of Americans agree that growth, when managed properly, is good for the community.

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People choose where they live based on the perception of good schools and safe streets. However, if not addressed effectively, increased traffic congestion, high rates of crime, crowded schools, and less open space can adversely affect citizens' quality of life. Consequently, people across the nation are debating what to do about future growth in their communities.

Some want to accommodate growth by providing necessary public infrastructure—roads, schools, water and sewer systems, and so forth—and developing a comprehensive plan to preserve open space and maintain local aesthetic values. Others want to slow or stop growth entirely by limiting the number of building

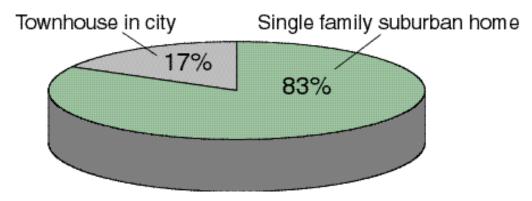
permits, drawing growth boundaries to prevent development outside the lines, and rejecting new road capacity that is necessary to accommodate new residential or commercial development.

The Myth

Adopting restrictions on growth to curb new development and foster highdensity residential and work

zones will create a more livable community by reducing traffic congestion, providing more desirable housing, preserving open spaces, and lowering the cost of public services and infrastructure. High-density development, by making transit, bicycling, and walking more viable alternatives to driving, will reduce traffic congestion.

Americans Prefer Single Family Suburban Homes



Source: National Association of Home Builders

The Facts

America's population is growing, creating demand for new housing and an expanded transportation infrastructure.

- Growth boundaries and other restrictions that limit development to areas where infrastructure already exists will severely curtail citizens' freedom to choose where they live and which mode of transportation they can use.
- The United States will need about 1.5 million new homes each year for the next decade to accommodate increases in population, according to the National Association of Home Builders (1999).
- In a nationwide survey by the National Association of Home Builders (NAHB), 83 percent of respondents said they would prefer a detached, single-family home in the suburbs instead of an equally priced townhouse in the city, even though the suburban home would entail longer distances to work, shopping, and public transportation.
- With a projected U.S. population increase of 60 million during the next 25 years, total travel also is expected to rise significantly, according to the U.S. Census Bureau (1990) and the U.S. Department of Transportation. The best way to accommodate travel increases without greater traffic congestion is to expand and improve all components of transportation systems.
- While growth boundaries or prohibitions against new construction may prevent development, thus preserving open space in particular areas, it is important to note that residential and commercial growth are fluid. If stopped in one place, growth will occur somewhere else. David Schulz (1998), a professor at Northwestern University, in comments made to the *Chicago Tribune*, concluded that inadequate road facilities in the developed areas of Chicago's suburbs has led to "hyper-sprawl" or noncontiguous, leap-frog growth.

Growth boundaries and similar policies, which aim to increase a city's

population density by artificially limiting the supply of developable land, tend to increase housing costs.

- The nation's 25 most affordable housing markets have an average population of 1,260 people per square mile, while the 25 most expensive housing markets have an average density that is three times as high—3,170 people per square mile—according to NAHB's housing-affordability index.
- Disproportionate shares of the nation's least-affordable housing markets are in Oregon, where growth boundaries have been in effect for more than 20 years. Rapid population growth may account for some of the increased housing costs in Portland, Eugene, Salem, and Medford, but other fast-growing cities, such as Denver, Las Vegas, and Phoenix, are not included among the nation's most expensive housing markets. The NAHB index shows that the artificial shortage of land created by Oregon's growth boundaries has made home ownership unaffordable for some residents.

Environmental improvement and economic development can work together to enhance our nation's quality of life.

- Building better communities means meeting human needs for natural resources, industrial products, energy, food, transportation, shelter, and effective waste management while improving environmental quality and conserving natural resources essential to future development.
- Economic competition drives companies to produce high-quality products using fewer raw materials, resulting in better management of our nation's resources.

Additional road capacity is a necessary part of a comprehensive plan to reduce traffic congestion in growing areas.

An analysis of the Texas Transportation Institute's (1999) annual study of traffic congestion in the nation's 68 largest cities indicates a significant correlation between increased urban density and higher levels of traffic congestion. As population increases, additional road capac-

ity and other measures are needed to avoid increased congestion.

- Regardless of density, driving accounts for more than 80 percent of commuter trips in every urban area of the United States except New York City, according to the U.S. Department of Transportation.
- The best way to relieve traffic congestion is through longterm regional planning that includes a variety of measures, such as computerized traffic signals, programs to expedite the removal of stalled cars and other roadway obstructions,
 - construction of more turn lanes and new roads where needed, and improved safety and efficiency of transit.
- While traffic congestion is worsening across the country, according to the Texas Transportation Institute (TTI), cities that have aggressively added road capacity in response to regional growth have had smaller increases in congestion than have other areas.

Our Position

America's population is growing, creating demand for new housing and an expanded transportation infrastructure. As Americans address the challenges associated with community growth, we should continue to emphasize development that preserves each person's right to choose where to live and how to travel.

Effective community development should take into account the type of open spaces, transportation facilities, housing, and commercial space desired by local citizens. Results of a

Effective community
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NAHB (1999) survey showed that Americans strongly prefer to live in detached, single-family homes with easy access to highways and neighborhood parks. The survey shows that the public adamantly rejects higher density development plans currently being implemented in certain parts of the country as solutions to growth issues. Those attitudes must be taken into account at all levels, especially at the local level where planning decisions should take place.

Efforts to regulate the pace and geographic scope of development in a community

should be tempered with an understanding of the impact that zoning and growth restrictions or inadequate road capacity can have on housing, prices, and traffic congestion. It is important to ensure that future generations will be able to pursue the American dream of affordable home ownership.

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A CRITIQUE OF "SMART-GROWTH" PLANS

Across the country and particularly in large metropolitan regions, people are talking about growth. While most appreciate the tremendous economic and social benefits that come with growth, many people are expressing concern over "growing pains," such as traffic congestion, school overcrowding, and the development of open spaces. Some advocates and politicians have coalesced behind a set of growth strategies they describe as "smart growth". But before supporting these strategies, concerned groups and individuals need to take a careful look at the policy details of the "smart growth" agenda.

A CRITIQUE OF "SMART-GROWTH" PLANS

Background

Across the country and particularly in large metropolitan regions, people are talking about growth. While most appreciate the tremendous economic and social benefits that come with growth, many people are expressing concern over "growing pains," such as traffic congestion, school overcrowding, and the development of open spaces.

Some advocates and politicians have coalesced behind a set of growth strategies they describe as "smart growth." To these proponents, "smart growth" means the imposition of growth boundaries to limit development in the suburbs, thereby decreasing the average person's living space (for example, allowing only the development of high-rise apartments and townhouses) and stopping new infrastructure investments (such as roads, waterlines, and sewers).

The Myth

"Smart-growth" practices, such as the imposition of suburban growth boundaries, increasing housing density, and transportation policies that invest more in rail transit and less in road improvements, will reduce traffic con-

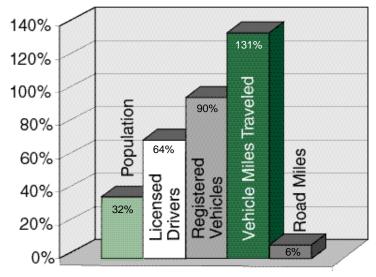
gestion, slow suburban development, and make communities more livable.

The Facts

Americans value their freedom to choose where to live and work and how to travel. "Smart-growth" plans aimed at decreasing personal living space and stopping new roads and road improvements will significantly limit home and travel choices.

- Americans are choosing to drive more now than ever. Since 1970, the U.S. population has grown by 32 percent, the number of licensed drivers by 64 percent, the number of vehicles by 90 percent, and the number of miles driven each year by an amazing 131 percent (U.S. Census Bureau 1990; U.S. Department of Transportation).
- Increased travel requires additional road capacity to avoid congestion. While the number of miles driven annually has increased 131 percent over the past three decades, road mileage in the United States grew from 3,730,082 miles in 1970 to 3,944,601 miles in 1997—an increase of just 5.7 percent (U.S Department of Transportation).

Increases in Travel Demand and Road Capacity Since 1970



Source: Federal Highway Administration & U.S. Census Bureau

- As a result, more than 31 percent of urban freeways are congested, and congestion now costs Americans more than \$72 billion a year in wasted time and fuel, according to the Texas Transportation Institute (1999).
- More than ever, Americans are choosing to live and work in the suburbs. Over half the population now lives in the suburbs, where 40 percent of jobs are located. Most workers commute from one suburb to another since more jobs are being created in the suburbs than anywhere else, according to transportation expert Alan Pisarski (1996).
- Growth boundaries and similar restrictions on development can make housing less affordable, limiting the choices available to homebuyers.
- Many of the factors that suburbanites list as top priorities in deciding where to live—an affordable, spacious house with a yard and low traffic congestion-are incompatible with the "smart-growth" vision of high-density, apartment-style living and restricted highway capacity.

Severe restrictions on growth promote high-density living and prevent the construction and improvement of roads, thereby leading to further traffic congestion.

- Regardless of density, driving accounts for more than 80 percent of all commuter trips in every urban area in the United States except New York City, according to U.S. Department of Transportation. The Texas Transportation Institute (TTI) has compared urban population densities with patterns of automobile travel and concluded that congestion gets worse as density increases unless highway capacity also increases.
- Increased density may result in lower *per-per-son* automobile use, but total automobile use increases with density because of the higher population in the affected area. For example, if doubling the population density in a region cuts automobile use by 20 percent on a percapita basis, total automobile use will rise by

60 percent. Additional road capacity will be necessary to avoid increased congestion.

A fundamental problem with encouraging high-density, apartment-style living is that most people choose to live otherwise.

• In NAHB's nationwide survey, 83 percent of respondents said they would prefer a detached, single-family home in the suburbs instead of an equally priced townhouse in the city, even though the suburban home would necessitate longer distances to work, shopping, and public transportation.

By artificially limiting the supply of available land, growth boundaries drastically increase housing costs.

- For example, disproportionate shares of the nation's least affordable housing markets are in Oregon where growth boundaries have been in effect for more than 20 years. Rapid population growth may account for some of the increased housing costs in Portland, Eugene, Salem, and Medford, but other fast-growing cities, such as Denver, Las Vegas and Phoenix, are not included among the nation's most expensive housing markets. The artificial shortage of land created by Oregon's growth boundaries has made home ownership unaffordable for some residents.
- Growth boundaries create higher population densities by channeling new residential and commercial development into areas within the boundary. High-density housing generally equals more-expensive housing. The NAHB's housing-affordability index indicates that the nation's 25 most affordable housing markets have an average population of 1,260 people per square mile, while the 25 most expensive housing markets have an average density more than two-and-a-half times higher (3,170 per square mile).

We should focus first on preserving open, green space close to home, such as neighborhood playgrounds, rather than large tracts of land in distant areas.

• Most people expressing an interest in the preservation of open, undeveloped space want

that space close to home. They want larger backyards, neighborhood playgrounds, and city parks, market research has indicated.

A prohibition against development in one area will inevitably result in development (and the elimination of open space) elsewhere.
 Efforts to preserve large tracts of open space by imposing growth boundaries or similar development restrictions can create leap-frog, noncontiguous development, described as "hyper-sprawl" by

described as "hyper-sprawl" by David Schulz (1998).

Our Position

Americans value their freedom to choose where they live and work and how they travel. People continue to live and work in the suburbs because they enjoy the quality of life in those communities. So-called "smart-growth" plans aimed at increasing housing densities and limiting highway capacity will restrict home and travel choices.

While some growth management is necessary to help alleviate the challenges associated with growth, such policies should follow, and not dictate, public sentiment. Growth-management policies must work with, not against, the overwhelming housing preference in this country: the detached, single-family home. While

Growth-management policies must work with, not against, the overwhelming housing preference in this country: the detached, single family home.

transit plays an important role in serving the transportation needs of some commuters, most Americans rely on the mobility and flexibility of travel offered them by the automobile. Growth management policies that restrict mobility, such as the failure to build needed road capacity, run counter to the needs and choices of most Americans.

"Smart-growth" policies, particularly those aimed at increasing urban density, often lead to higher housing costs and increased traffic congestion.

Building additional road capacity is an effective way to reduce traffic congestion and make transportation more efficient. Policies aimed at shifting people out of private vehicles and into public transit have been ineffective as people continue to meet the growing demand for mobility by making travel decisions based on convenience, cost, comfort, and safety. Policies aimed at preserving open, green space should focus on areas close to home. Americans prefer larger backyards, neighborhood playgrounds, and city parks to tracts of land in outlying areas.

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TRAFFIC CONGESTION

TRAFFIC CONGESTION

Traffic congestion is getting worse throughout the country and is becoming a major concern of the American public. Anti-road groups often cite traffic congestion as one of the biggest problems caused by rapid growth of neighborhoods and communities. These anti-growth groups advocate policies to restrict road-capacity improvements and devote that funding instead to transit, bicycling, and other alternatives to driving. The best way to reduce traffic congestion, however, is through better long-term regional planning that incorporates a comprehensive approach to expand and improve all aspects of our nation's transportation system.

TRAFFIC CONGESTION

Background

Traffic congestion is getting worse throughout the country and is becoming a major concern of the American public. Recent public opinion polls nationwide show consistently that increased traffic congestion is among the top two or three factors people cite as having a major impact on their daily lives.

A 1999 study by the Texas Transportation Institute (TTI) shows that traffic congestion is no longer just a big city problem: Traffic congestion is growing in small- and medium-sized markets at an even faster rate than in urban areas. Increasingly, major roads are becoming congested, and rush hours are lengthening.

Anti-road groups cite traffic congestion as one of the biggest problems caused by rapid growth of neighborhoods and communities. These groups advocate policies to restrict road-capacity improvements and impose or encourage high-density and mixed-use developments designed to make transit, bicycling, and walking more practical as alternatives to driving.

The Myth

"You can't build your way out of congestion," or, "Build it and they will come." These two phrases summarize the theory of induced travel. Building more roads leads to an increased number of cars and vehicle travel, thereby exacerbating congestion and increasing development.

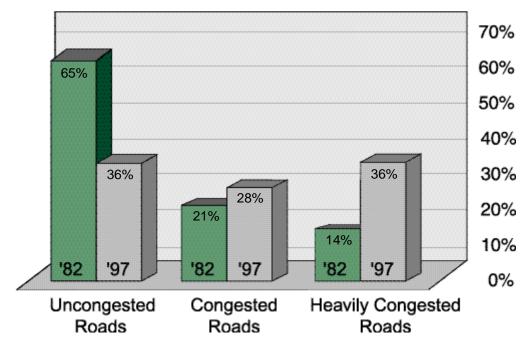
The Facts

Traffic congestion is growing nationwide, leading to increased costs to motorists in wasted time and fuel use.

According to TTI (1999):

- More than 31 percent of urban freeways throughout the country are congested.
- Traffic congestion costs motorists more than \$72 billion a year in wasted time and fuel costs.
- Americans waste more than 4.3 billion hours per year stuck in traffic—approximately 34 hours per driver.

Congestion is Increasing in 70 of the Nation's Largest Urban Areas



Source: Texas Transportation Institute

 The amount of time motorists in small- and medium- sized cities spend stalled in traffic has more than quadrupled since 1982, and this figure is growing at a much faster rate than in larger cities.

Highway travel in the United States is growing and will continue to grow in the years ahead.

- Over the past quarter-century, highway travel in the United States has increased by 131 percent and the population has increased by 32 percent, while road mileage has grown from 3,730,082 miles in 1970 to 3,944,601 miles in 1997, an increase of just 5.7 percent (U.S. Census Bureau 1990; U.S. Department of Transportation).
- The U.S. Census Bureau estimates that the population of the United States will grow by 60 million people between 1995 and 2020.
- Highway travel is forecasted to increase about 40 percent by 2015, according to the U.S. Department of Transportation.

Building new roads and improving existing roads are effective ways of reducing traffic congestion and enhancing transportation efficiency; new and improved roads have only a limited effect on inducing new travel demand.

- While traffic congestion is worsening across the country, according to the Texas Transportation Institute (TTI), cities that have aggressively added road capacity in response to regional growth have had smaller increases in congestion than have other areas.
- A 1998 Federal Highway Administration report found that increased vehicle travel on expanded road capacity is largely the result of traffic being diverted from nearby routes or from shifts in travel times. Diverting traffic reduces overall regional traffic congestion. The study concluded that only 5 to 13 percent of the new traffic on expanded urban highways is attributable to new highway travel actually induced by the expanded capacity.
- A study by the University of Illinois at Chicago (1998) of regional development patterns in the Chicago area did not find a connection

- between road building and rapid growth of neighborhoods and communities. Chicago has experienced tremendous suburban growth despite the lack of any new urban highways. This study concluded that urban decentralization was caused largely by increasingly affluent residents and businesses pursuing their preferences in lifestyles, environments, and community amenities.
- The General Accounting Office (1999), an investigative arm of Congress, recently concluded that many factors contribute to urban dispersal. The relationships among these factors are so complex that it is very difficult to assess what roles are played by individual factors, such as highway development.

Our Position

The best way to reduce traffic congestion is through better long-term regional planning that incorporates a comprehensive approach to expand and improve our nation's transportation system. To achieve this goal, we should use all of the tools at our disposal, including computerized traffic signals and new computer technology to improve traffic flow, additional turn lanes at crowded intersections, safer and more convenient transit, and, where appropriate, wider roads and new roads. This also includes strategies in the private sector to promote options that do not involve the use of our transportation system, such as employee flextime and telecommuting.

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AIR QUALITY

Safeguarding the air we breathe is one of our most important environmental objectives, and communities serious about improving air quality should focus on projects that improve traffic flow and relieve congestion. Our nation's air quality has improved significantly over the past 30 years and will continue to improve largely because of a combination of cleaner cars and improvements in fuel technology. In contrast, programs encouraging citizens to reduce travel in their personal vehicles have had a minimal impact on air quality.

AIR QUALITY

Background

The nation's air quality continues to improve, largely a result of the continued reduction in emissions from motor vehicles because of the ongoing improvements in vehicle and fuel technology, according to an analysis of the U.S. Environmental Protection Agency's (EPA) annual air quality trends report (1998). This reduction in overall highway vehicle emissions has occurred even while national levels of highway travel continue to increase. For example, highway travel *increased* by 131 percent during the last three decades, but tailpipe emissions of smog-causing volatile organic compounds (VOCs) *decreased* by 60 percent.

The level of emissions from individual vehicles depends on various factors, including the maintenance of the vehicle, driver behavior, and traffic conditions. Cars that are well maintained have lower levels of emissions. Vehicles also have lower levels of emissions at speeds between 15 and 60 miles per hour.

Vehicles that experience quick accelerations and variances in speed emit more pollutants. Therefore, traffic congestion can cause increased emissions because it results in slow-moving traffic, inefficient stop and go travel, and longer engine running times.

Projects that improve traffic flow and relieve traffic congestion improve air quality.

The Myth

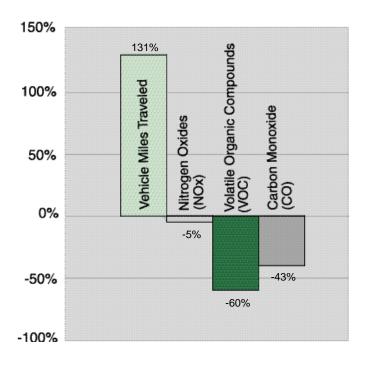
Meeting the nation's air quality goals will require that Americans reduce their level of private vehicle travel.

The Facts

The reduction in overall vehicle emissions has occurred at the same time highway travel has increased.

The most critical emissions from cars and trucks are VOCs and nitrogen oxides (NOx). These two compounds react with sunlight to form ground-level ozone, which is the primary constituent of smog.

Auto Emissions Decreased While Highway Travel Increased Dramatically (1970–1997)



Source: Federal Highway Administration and Environmental Protection Agency Between 1970 and 1997, overall emissions from all U.S. highway vehicles declined significantly. According to EPA (1998):

- Volatile organic compounds decreased by 60 percent.
- Nitrogen oxides fell by 5 percent.
- Carbon monoxide decreased by 43 percent.
- Lead has been virtually eliminated.

These decreases have occurred despite continued significant increases in overall highway travel in the U.S. In fact, between 1970 and 1997, highway travel increased 131 percent, and the number of licensed drivers increased 64 percent nationally (U.S. Census Bureau 1990; U.S. Department of Transportation).

Our nation's air quality is getting much better largely because of a combination of cleaner cars and improvements

in fuel technology.

- Combining errands because pollution reduction equipment operates more efficiently when the engine is warm
- Improving transportation infrastructure to reduce congestion and eliminate stop-and-go driving

Our Position

Improving air quality is an important challenge that we must address in the most practical way possible. We should reject policy approaches that suggest that transportation improvements and air quality improvements are mutually exclusive. In fact, transportation improvements to reduce congestion and smooth the flow of traffic should be important components of a comprehensive plan to improve air quality.

Our nation's air quality is getting much better largely because of a combination of cleaner cars and improvements in fuel technology. In contrast, programs encouraging citizens to reduce travel in their personal vehicles have not worked to improve air quality.

The EPA predicts that motor vehicle emissions will continue to decrease through the year 2010 even as highway travel continues to increase.

The EPA (1999) forecasts that between 1997 and 2010 vehicle emissions of:

- Volatile organic compounds will decrease by 30 percent.
- Nitrogen oxide will decrease by 31 percent.
- Carbon monoxide will decrease by 20 percent.

A variety of means, including the following, can decrease emissions of pollutants from motor vehicles:

• Properly maintaining the pollution technology installed on the vehicle

Endnotes

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TRANSIT

A more efficient and improved transit system has an important role to play in reducing traffic congestion. However, transit should not be seen as an alternative to expanding road capacity in meeting the demand for additional mobility. Instead, improvements in the capacity and efficiency of transit and road systems are complementary elements of a comprehensive approach to relieving congestion and meeting long-term transportation and environmental goals.

TRANSIT

Background

Transit continues to play an important role in providing Americans with mobility, and future increases in transit ridership would help meet the nation's growing transportation needs. Today, the nation's public and private transit systems operate mostly in several niche markets. These key markets include commuting, particularly along heavily traveled routes in large urban areas, mobility for those who are either unable or cannot afford to travel in a private vehicle, and for institutional travel, such as school busing. Increasing transit's modest share of overall travel, however, remains a significant challenge and may require some changes in how it is currently operated.

The Myth

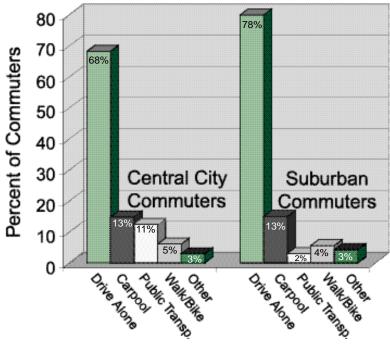
Increased ridership on public transit systems alone can meet the nation's additional future urban transportation needs and will reduce traffic congestion and improve air quality.

The Facts

Transit's share of travel has declined despite substantial public investments over the past 30 years.

- Transit ridership in the United States peaked during World War II and then declined significantly as increased car ownership and suburban growth reduced population in the urban core, according to the American Public Transit Association (1999). The continued dispersal of homes and jobs to the suburbs and outer suburbs based on growing incomes and a desire for additional space have reduced the competitiveness of transit with private vehicles. While 11 percent of workers in central cities commute by transit, only 2 percent of suburban workers commute by transit.
- In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act (ISTEA)
 which gave state and local governments
 unprecedented flexibility in using federal dollars, previously restricted largely to road and
 bridge projects, for public transit investments.





Source: U.S. Census Bureau and Commuting In America II

The additional federal funds have so far been unable to boost the share of travel on public transit. Between 1980 and 1995, the use of transit for commuting to work decreased from 6.3 percent to 3.5 percent with its overall share of travel standing at only 2.1 percent, according to a report by the Reason Foundation (1998).

- Time is a very precious commodity, especially to families. Most people prefer to commute in a private vehicle, because they wish to minimize travel time. The average commute by car is 21 minutes, by bus it is 38 minutes, and by rail it is 45 minutes, according to transportation analyst Alan Pisarski (1996), using data from the 1990 census.
- Many people, especially working mothers, make frequent stops on the way to and from work, to drop off and pick up children from school, to buy groceries, and run other errands. Trips like these require the flexibility of the personal automobile, since transit, especially rail transit, runs along fixed routes.

An emphasis on rail transit systems has not reduced urban traffic congestion.

• The availability of federal funds to pay for the construction of large urban transit projects has contributed to a resurgence of rail transit over the last 15 years. New systems have opened in Baltimore, Buffalo, Dallas, Denver, Miami, Portland, Sacramento, San Jose, and St. Louis.

- Despite this increase in funding and expansion of the system, there has been a decrease in transit's share of travel. In fact, Jonathan Richmond of Harvard University (1998) notes, "...with low ridership and most patrons drawn from bus transit, there is no case where new rail service has been shown to noticeably improve highway congestion or air quality."
- In the 1970s, officials in the Washington, D.C., metropolitan area decided to limit road building and focus more resources on construction of a rail transit system and high-occupancy vehicle (HOV) lanes. Today, despite remarkably high levels of transit use and carpooling, Washington has the second worst traffic congestion in the United States, according to the Texas Transportation Institute (1999).
- An analysis of recent U.S. urban transportation policy by the University of Texas (1999) concluded that regional governments "...generally erred by using disproportionate amounts of available subsidy dollars to construct and operate costly and ineffective rail transit systems instead of improving bus service and reducing fares."
- A much more affordable way to increase transit ridership is the construction of bus-only express lanes or HOV lanes. Research indicates that the overall costs per person-trip for bus-only lanes or HOV lanes is significantly lower than for rail transit expansions.

Average Commute Times For Various Travel Modes (1996)

CAR 21 minutes

BUS 38 minutes



RAIL 45 minutes



Source: U.S. Census Bureau and Commuting in America II

Privately operated transit services may reduce costs and increase ridership.

Despite the investment of \$200 billion in government subsidies over the last 30 years, transit's share of national travel has decreased. This failure is partially the result of declining productivity corresponding to a shift from privately operated transit systems to public

operation. In fact, public transit operating costs have increased four times faster than the rate of inflation over the last 30 years according to the Reason Public Policy Institute (1998).

• In 1955, only 3 percent of the nation's transit systems were publicly owned. Nevertheless, by 1980, 94 percent of all transit service provided in the United States was by government transit agencies, according to the University of Tezas study. Today, transit continues to be largely provided by government

agencies, with only 10 percent of transit services nationwide contracted through competitive bidding. Studies show, however, that bus service provided by competitive services is significantly less costly than that provided by noncompetitive services.

Our Position

A more efficient and improved transit system has an important role to play in reducing traffic congestion. If we are truly going to reduce traffic congestion and improve the environment, however, transit improvements must be supplemented by additional capacity to our road system and better use of computerized traffic signals and other "smart-road" technologies.

Increasing future levels of transit usage will be an important objective of an overall strategy for meeting the nation's growing transportation needs, but higher transit use alone will not resolve our nation's growing traffic congestion problems. Attracting more riders to transit will require that transit service be better designed to meet the needs of potential riders. It must become more convenient and provide its patrons with increased personal safety if it is to meet the complex transportation needs of an increasingly suburbanized society.

Transit investment should be based on the type of service-rail, bus, demand—responsive, or van programs—that will offer the largest

increase in mobility. Transit providers must also be allowed to provide their service at the most competitive cost possible while still providing appropriate service.

Transit should not be seen as an alternative to expanding road capacity in meeting the demand for additional mobility. Instead, improvements in the capacity and efficiency of transit and roads systems are complementary elements of a comprehensive approach to relieving congestion and meeting long-term transportation and environmental goals.

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PROVIDING FREEDOM AND OPPORTUNITY

THE AUTOMOBILE: PROVIDING FREEDOM AND OPPORTUNITY

The automobile is the most practical and democratic transportation device in history. It enables millions of people to go to work, to the store, to the doctor's office, to the soccer field—to go where they want to go, when they want to go, and do what they need to do—within a reasonable amount of time. Learn how the automobile is a fundamental part of modern American culture in this section.

THE AUTOMOBILE: PROVIDING FREEDOM AND OPPORTUNITY

Background

The automobile is a fundamental part of modern American culture. It is the most practical and democratic transportation device in history. The automobile enables millions of people to go to work, to the store, to the doctor's office, to the soccer field—to go where they want to go, when they want to go, and do what they need to do—within a reasonable amount of time.

Before the twentieth century, a few wealthy Americans had horses and carriages for urban travel and traveled mostly by train between cities. The vast majority of Americans rarely traveled more than 50 miles from home. Today, the average American travels 14,000 miles per year by automobile (cars and light trucks), according to the Bureau of Transportation Statistics (U.S. Department of Transportation 1998). Most non-auto travel is by air: an average of 1,700 miles per person per year.

Millions of Americans rely on the U.S. highway system to ship their products to other businesses, consumers, and markets here and abroad. Mobility on America's Interstate Highway system has been a key factor in the sustained economic growth and prosperity during the 1990's. Business establishments in the U.S. shipped more commercial freight and packages in 1997 than in 1993, valued at \$6.4 trillion. Changes in how and where goods are

produced and increases in international trade will contribute to the rise in freight tonnage over the next decade.

The automobile has opened the vistas of the United States. Most Americans can spend a weekend hiking in the mountains or swimming at the shore with only minimal travel time. Most people also use their cars when they travel longer distances on vacation.

The automobile has made it easier for Americans to live where they want to live and pursue their own lifestyles. Most Americans live only minutes away from medical care. People can live in one county and work in another. Mobility provides employers with a greater choice of workers and gives employees a greater choice of jobs. Farm families, once isolated from the rest of the world for most of the year, can now journey to town in minutes.

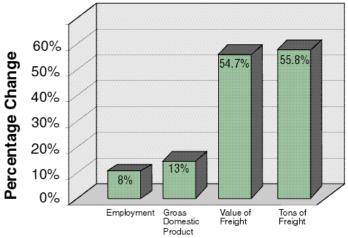
The Myth

America's high level of dependence upon the automobile has lowered the standard of living, snarled traffic, and lowered air quality.

The Facts

The mobility provided by our highways is critical to the modern American lifestyle.

Truck Shipments and Related Factors of Growth: 1993–97



Source: U.S. Department of Transportation

- Six out of every seven trips taken by Americans are in a car, truck, or motorcycle, according to the Bureau of Transportation Statistics (U.S. Department of Transportation 1998). These trips are for a variety of purposes, with only 20 percent of trips for travel to work or on work-related business.
- Highway travel accounts for 90 percent of all passenger miles traveled in the United States. Air travel provides 9 percent and rail transit 1 percent, according to the Bureau of Transportation Statistics.
- Motorists pay considerably more each year in taxes and fees related to driving than the full cost of roads, according to a report by the American Petroleum Institute (1998). Highway taxes not spent on roads are diverted to mass transit and other non-highway expenses.
- Air quality has significantly improved, thanks in large part to reductions in overall highway vehicle emissions, while at the same time highway travel has increased.
- Transit's share of overall travel has not increased over the past decade largely because average travel times on transit are approximately double the travel time in private vehicles, says transportation analyst Alan Pisarski (1996). Studies also show that working women are especially dependent on their own cars to do family errands on the way to and from work.
- The automobile gives most Americans fast, easy access to medical care, fire and police protection, and other lifesaving, emergency assistance.
- The Federal Highway Administration (1999) makes it clear that only a small portion of additional travel occurs solely because of new capacity added to a previously congested road.
- The nation's road system remains the vital link in a national transportation system that allows Americans to travel outside their communities for tourism or to visit friends or

- relatives. The American Travel Survey (1998) found that Americans took 82 percent of all trips to a destination at least 100 miles away for tourism or visiting in personal vehicles.
- Highways and the mobility they afford play a key role in the growing US economy and contribute a sizable portion to the Gross Domestic Product.

Our Position

The automobile has made it possible for people to enjoy a great deal of freedom in all aspects

> of their lives. The mobility provided by automobiles is critical

to the modern American lifestyle. Well-planned and maintained roads prevent many of the problems about which

critics complain. Traffic conges-

driving too much but is a result

tion is not a result of people

of a road network that has failed to keep pace with the nation's growing transportation demands. By adopting a balanced approach to congestion, including building the necessary road capacity, improving the efficiency of existing roads, and making transit safer and more convenient, we can relieve congestion.

Faster, smooth-flowing traffic is also better for the environment, because it results in fewer emissions than stop-and-go traffic. Technology also is making great strides in reducing air pollution from automobiles. Tailpipe emissions have already decreased 95 percent since 1970, thanks to cleaner cars and cleaner fuels, a technological trend expected to continue in the future.

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The mobility provided by

automobiles is critical to

the modern American

lifestyle.

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TRAFFIC CALMING

Traffic calming refers to a number of methods of slowing traffic and making room for pedestrians and bicycles. While traffic calming may be an effective way of balancing the transportation needs of pedestrians, bicyclists, and motorists, communities must ensure that traffic calming methods they adopt do not reduce safety, increase congestion, harm air quality, or reduce access by emergency vehicles.

TRAFFIC CALMING

Background

The term "traffic calming" includes a variety of measures to slow motor vehicles and make room for bicycles and pedestrians. Originally, traffic-calming measures were designed to improve safety by reducing speed on neighborhood streets. More recently, however, calming devices have been proposed for some major commuting corridors to impede the flow of traffic, thereby encouraging motorists to choose other routes or other means of transportation. Traffic-calming devices include the following:

- Speed bumps: pavement bumps that are either narrow and abrupt or wider with a more gradual rise
- Traffic circles on residential roads or rotaries on major corridors: raised islands, often landscaped with ground cover and trees in the middle of an intersection
- Chicanes, bends, or deviations: curbs that extend alternately from opposite sides to form a serpentine path
- Chokers: various forms of narrowing the road at midblock or intersections usually by protruding sidewalks or sharp turns
- Narrow roads: significantly reduced lane widths, often including wider sidewalks that eliminate any road shoulder area
- Directional barriers: diverters that either force people to turn or prevent vehicles from entering certain streets

Traffic calming can slow vehicular traffic very effectively. Depending on the type of device and the road on which it is deployed, however, traffic calming can present significant safety hazards for motorists and bicyclists, delay emergency response vehicles, increase traffic congestion, reduce access for commercial vehicles, and increase air pollution.

The Myth

By forcing drivers to slow down, trafficcalming devices improve public safety and encourage motorists to consider other means of transportation.

The Facts

Improving access for pedestrians and bicyclists and better integrating streets into residential and commercial areas is an important challenge for regional planners. The traffic-calming strategies adopted by a region must be tailored to

the unique transportation and aesthetic needs of a community.

Traffic-calming devices that slow emergency response time should be of particular concern to communities. A study in Boulder, Colorado, found that speed bumps, for example, increased emergency response time by an average of 14 percent—a potentially fatal difference.

Some traffic-calming methods may also tend to punish the majority of responsible drivers rather than the handful who do not drive appropriately. In San Jose, California, city officials recently decided to eliminate the city's speed bumps, noting they would no longer penalize 95 percent of drivers for problems caused by the other 5 percent.

Much of the desire for traffic-calming strategies is based on a wish to make residential or smaller commercial streets safer, less congested, and more friendly for those who are not driving. But many traffic-calming strategies may actually have unintended consequences, such as increasing overall traffic congestion, both on

When crafting appropriate traffic-calming strategies, care must be taken to not solve one problem and create another.

the affected streets and on other, larger streets, where traffic is diverted by the reduced capacity of streets with traffic-calming devices. This increased congestion results in increased emissions and degraded air quality in the region.

When crafting appropriate traffic-calming strategies, care must be taken to not solve one problem and create another. Traffic calming should not reduce emergency vehicle access, discourage access to commercial sites, or cause increased traffic congestion on other routes. It should contribute to increased safety for pedestrians, bicyclists, and motorists. Many of the goals of traffic calming can be achieved by ensuring that major roads are able to carry appropriate levels of traffic and minimizing the desirability of less appropriate routes. Appropriate traffic-calming measures that a community may wish to implement include the following:

 better synchronization of traffic signals, which has been found to reduce travel times by 30 percent

- raised sidewalks and separate bike paths
- strict enforcement of speed limits on all streets
- adequate traffic capacity on major roads
- medians to separate directional traffic

Our Position

Traffic calming may be an effective way of designing streets to balance the transportation needs of pedestrians, bicyclists, and motorists. To be effective, traffic calming should not reduce safety, increase congestion, harm air quality, or reduce access by emergency vehicles. Traffic-calming decisions are best made after conducting a comprehensive study on environmental, economic, and safety impacts.

CASE STUDY: SHOULD WE FOLLOW THE EUROPEAN MODEL?

Some "smart growth" activists have urged U.S. cities to model themselves after those in Europe, where, they claim, government policies limiting growth and encouraging transit ridership have resulted in reduced auto-dependence and little suburban development. However, Europeans are themselves abandoning the European model, turning toward car ownership and moving into the suburbs.

CASE STUDY: SHOULD WE FOLLOW THE EUROPEAN MODEL?

Background

Europe, with its higher population densities, greater public transit service, lower road capacity per capita, and higher fuel prices, offers an opportunity to examine many of the policies being proposed in the United States to alter transportation and development patterns. Many of these policies are being promoted as a way to reduce automobile dependence and discourage suburbanization. Recent trends in Europe suggest that these policies may actually prove ineffective in changing American lifestyle choices.

The Myth

Land-use planning and heavy transit investments have produced low levels of dependence upon the automobile and little suburban development in Europe.

The Facts

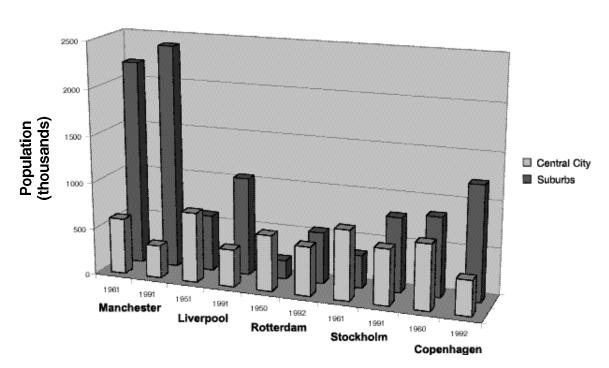
As average incomes have risen over recent decades, Europeans are buying more cars and driving more.

- European car ownership is increasing three times faster than it is in the United States, according to transportation analyst Wendell Cox (1999).
- Cox also found that despite the availability of public transit, 82 percent of all travel in the European Union is by car; 18 percent is by rail, bus, or trolley.

Despite the efforts of planners, most European cities are rapidly decentralizing.

• European inner-city populations are falling. Between 1950 and 1992, Amsterdam's central city population decreased 10 percent; between 1960 and 1992, Copenhagen's central city pop-

Europe's Suburban Population is Growing



Source: Professor Genevieve Giuliano, University of Southern California

ulation fell 35 percent; between 1954 and 1991, Paris's central city population fell 27 percent; and between 1961 and 1991, Stockholm's central city population fell by 16 percent (Newman and Kenworthy (1989) with additional information supplied by Wendell Cox (1999)).

- Newman and Kenworthy also found that Europe's suburban populations are increasing.
 Between 1950 and 1992, Amsterdam's suburban population increased by 197 percent;
 between 1960 and 1992, Copenhagen's suburban population increased by 138 percent;
 between 1954 and 1991, Paris's suburban population increased by 105 percent; and between 1961 and 1991, Stockholm's suburban population increased by 164 percent (Cox 1999).
- In addition, Newman and Kenworthy's research showed that, as a result of the significant population decentralization occurring in Europe, a majority of people in many urban regions now live in the suburbs. By the early 1990s, 58 percent of Amsterdam's residents were suburban; 72 percent of Copenhagen's residents were suburban; 79 percent of Paris's residents were suburban; and 55 percent of Stockholm's residents were suburban.

Our Position

Despite punitive taxes on motor vehicles and fuels (which make gas almost twice as expensive as it is in the United States), rules to discourage driving, and draconian land-use laws regulating suburban development, car ownership and suburban development are on the rise in Europe. As average incomes have risen over recent decades, Europeans are buying more cars and driving more. European car ownership is increasing three times faster than it is in the United States.

The concept of using anti-growth policies to force high-density living has simply not achieved its goal of keeping the citizens of the continent in central cities. Most European cities are rapidly decentralizing.

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CASE STUDY: THE PORTLAND EXPERIMENT

Portland, Oregon is often cited by anti-growth activists as an example of all the best that "smart growth" policies can accomplish. But traffic congestion and high housing prices are just two of the problems associated with the Portland's policy of increasing housing density and limiting road expansion.

CASE STUDY: THE PORTLAND EXPERIMENT

Background

Portland, Oregon, is often held up by antigrowth activists as an example of all the best that high-density planning can accomplish. They claim that an urban growth boundary drawn in 1979 has controlled growth and that light rail lines have led Portlanders to be less dependent on automobiles. Public officials and reporters from all over the country are regularly taken on tours of the city to see how planning ought to be done. They are shown the rejuvenated downtown, the light rail line, and the urban growth boundary and are told by planners and anti-growth activists that Portland is "one of the nation's most livable cities," as cited in a Sierra Club report (1998). But is it?

The Myth

By encouraging higher population densities, building transit instead of roads, and adopting other restrictive planning policies, Portland has improved residents' quality of life, revitalizing the community and making residents less dependent on cars.

The Facts

By imposing strict zoning policies, Portland's planners have severely limited

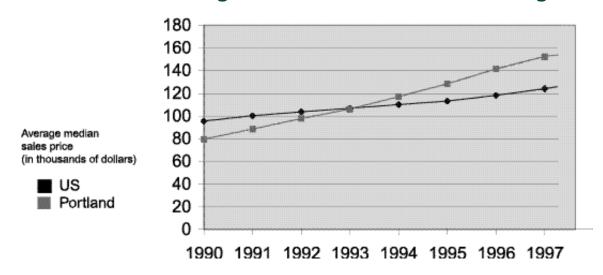
the choices of city residents about how and where they live.

- Limitations on development outside the city's growth boundary have made Portland one of the least affordable cities in the country in which to buy a house. Data from the National Association of Home Builders (1999) indicate that Portland went from being one of the nation's most affordable housing markets in the late 1980s to one of the least affordable in the late 1990s.
- Housing prices skyrocketed 99 percent in seven years during this decade (the highest rate of increase in the country), while the national average was a 35-percent increase.
- Portland created a regional authority with unprecedented power over zoning and land use issues.

Portland's emphasis on transit instead of highway capacity has had little impact on transit's share of overall travel: Portlanders remain as reliant on their cars as residents of any other city.

 Ninety-two percent of all trips in the Portland area are by automobile and fewer than 2.5 percent are by transit, according to Metro (1994), the Portland area's regional planning authority. Even if their policies are fully implemented,

Portland Housing Costs Now Exceed U.S. Average



Source: National Association of Home Builders

Portland planners still predict that 88 percent of travel in the area will be by car and less than 5 percent will be by transit, according to Metro.

- Although a relatively high percentage of downtown commuters use transit, only a small percentage of Portland-area jobs are downtown. The area's light rail system has not attracted even one-half the number of riders originally projected by planners, and voters have rejected expensive additional light rail plans three times in the last five years.
- Portland's policy of spending most of the region's transportation dollars on transit rather than roads has made congestion in the area worse. As a result, Portland now ranks among the top ten most congested cities in the United States, according to the Texas Transportation Institute's roadway congestion index (1999). Regional planners project that future levels of traffic congestion will get substantially worse as a result of Portland's transportation policies.

Our Position

Growth should be recognized as a reality and planned for adequately. Rather than adopting the Portland model, localities should adopt a balanced, comprehensive approach to planning that recognizes the need for both low- and high-density development and for additional road capacity, as well as transit and other options to address congestion.

Business groups in the Portland metropolitan area and statewide have joined together to recommend urban growth and economic development policy changes that will balance Portland's decision to contain growth with the need to provide adequate land for housing and jobs. In the Portland area, groups have identified the need to expand the urban growth boundary to accommodate a 20-year supply of land for industrial and commercial development as well as housing.

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CASE STUDY: THE LOS ANGELES SYNDROME: A PRESCRIPTION FOR THE REST OF US?

Two of the main themes associated with the "smart growth" movement are high-density development and investment in transit rather than new road capacity. Ironically, Los Angeles is the highest density metropolitan area in the country with the lowest number of freeway miles per person of any U.S. city. At the same time, it has the worst traffic congestion and the poorest air quality in the country. High-density development and inadequate road capacity have not worked for Los Angeles.

CASE STUDY: THE LOS ANGELES SYNDROME: A PRESCRIPTION FOR THE REST OF US?

Background

Los Angeles, the nation's most populous metropolitan area, has a variety of cultural, educational, and economic opportunities that continue to attract thousands of new residents each year. Yet Los Angeles, where the average driver wastes more than 82 hours each year sitting in traffic, also ranks first in the nation for traffic congestion (Texas Transportation Institute 1999) and air pollution (U.S. Environmental Protection Agency 1998). The Sierra Club (1998) describes Los Angeles as "the granddaddy of sprawl" and says that it is the "standard for the worst that sprawl has to offer."

Arguing that the city is too spread out and too dependent on highways, anti-growth activists often cite L.A.'s congestion and air quality problems as evidence that higher-density, more compact urban development and less emphasis on highways will produce less traffic congestion, cleaner air, and a more livable community. But will it?

The Myth

Los Angeles is a sprawling area served extensively by freeways. Los Angeles's traffic congestion and air quality problems are largely the result of the extensive freeway system and sprawling development.

The Facts

Los Angeles is a high-density metropolitan area that has invested heavily in the development of a rail transit system rather than adding highway capacity to address its traffic congestion problems.

 At 5,500 people per square mile, Los Angeles is the highest density metropolitan area in the country, according to the Federal Highway Administration (FHWA 1997).

- The population density of Los Angeles is more than one-third greater than the New York-Northern New Jersey metropolitan area, which has 4,100 people per square mile.
- The population density of Los Angeles is relatively uniformly distributed. Unlike New York, which has a very high density in Manhattan surrounded by low-density suburbs, Los Angeles has a relatively low-density downtown but relatively high densities throughout the rest of its metropolitan areas.
- At 52 miles per million people, Los Angeles has the lowest number of miles of freeway per capita of any U.S. city, according to the FHWA. By comparison, the national average is 114 freeway miles per million people. Due to inadequate road capacity, the average driver in Los Angeles wastes more than 82 hours each year sitting in traffic, according to TTI (1999).



 Los Angeles has spent billions of dollars building a rail transit system. With much lower than projected ridership and cost overruns in the millions of dollars, support for the system has virtually evaporated.

Our Position

Anti-growth activists argue that the best way to avoid the air quality and traffic congestion problems of Los Angeles is to restrict road mileage and increase urban density. However, Los Angeles is one of the highest-density metropolitan areas in the United States, and it has the lowest number of freeway miles per person. Los Angeles also has the poorest air quality and worst traffic congestion in the nation. High-density development and inadequate road capacity have not worked for Los Angeles.

Localities should adopt a balanced, comprehensive approach to planning that recognizes the need for both low- and high-density development and for additional road capacity, as well as transit and other options to address congestion.

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CASE STUDY: WASHINGTON, D.C.: A MAP FOR CONGESTION

In the 1960s, transportation officials in and around Washington, D.C. devised an ambitious, comprehensive transportation plan for the metropolitan region that called for additional transit, the construction of high occupancy vehicle (HOV) lanes to encourage carpooling, and 14 new highways. Officials built the rail transit system and carpool lanes, while deciding to forego nearly 1,500 miles of highways in the original plan. As a result, congestion in Washington, D.C. is now second only to Los Angeles. As D.C. demonstrated, failing to build new highways to keep up with growth, is a road map for congestion.

CASE STUDY: WASHINGTON, D.C.: A MAP FOR CONGESTION

The lesson of

Washington, D.C. is that

growing communities

cannot afford not to

build new roads.

Background

In the 1960s, officials in Washington, D.C., and the surrounding suburbs of Virginia and

Maryland devised an ambitious, comprehensive transportation plan for the metropolitan region. The plan called for construction of

- a world-class underground rail system
- high occupancy vehicle (HOV) lanes to encourage carpooling
- 14 new highways

In the 1970s, however, regional leaders made a conscious decision to limit road building and to focus more resources on the Metrorail transit system and HOV lanes. As a result, 13 highway projects—representing nearly 1,500 lane miles—were dropped from the original transportation plan. What has this loss of addi-

tional highway capacity meant for the nation's capital?

The Myth

By investing in transit and other transportation alternatives, growing cities can eliminate the need for additional highway capacity.

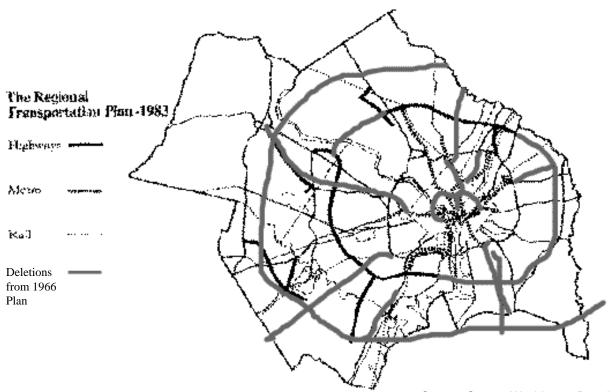
The Facts

At the expense of highways, Washington's rates of transit use and carpooling

rank among the nation's highest.

• Washington's transit investments have paid remarkable dividends. Washington has the second highest rail ridership and the fourth highest bus ridership in the country. Overall, Washington ranks third in the percentage of commuters who use transit (13.4%).

Washington, D.C.'s Map for Congestion



 Washington ranks first in the nation in percentage of workers who carpool (16%).
 This ranking is partially due to the HOV lanes, but also is a result of the large number of federal employees in downtown D.C. who receive preferential parking and other incentives for carpooling.

Despite remarkably high levels of transit use and carpooling, Washington has the second worst congestion in the U.S. according to the Texas Transportation Institute (1999).

- Washington's failure to invest in additional highway capacity has left residents with the second longest average commute in the nation (29.5 minutes), 30 percent higher than the national average.
- Congestion costs Washingtonians dearly in terms of wasted time and fuel. Washington's \$1,260 annual per-driver congestion cost ranks second nationally (TTI 1999).

Our Position

The lesson of Washington, D.C., is that growing communities cannot afford not to build new roads. While it is clear from past experience that no single strategy can adequately address the problems of traffic congestion, a balanced, comprehensive approach can lessen the stifling gridlock found on many highways.

Such an approach needs to include improving the convenience and safety of transit. At the same time, we need to use the roads we already have in the most efficient way possible. Investing in smart-road technologies, such as synchronized traffic lights, computerized systems to route traffic around congested areas, reversible commuter lanes, and movable barriers that add road capacity during peak hours of travel, will help. Nevertheless, additional lanes and new roads are needed in some locations to meet growing transportation demand.

Endnote

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